

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2004/000512

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: A62C 3/00, A62C 35/00, A62C 35/58, A62C 37/48, F24F 3/16, F24F 13/02, F24F 7/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: A62C, F24F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, EPO-INTERNAL, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| A | US 5957212 A (GÖRAN SUNDHOLM), 28 Sept 1999 (28.09.1999), column 1, line 21 - line 62, figures 1-5, claims 1-8 -- | 1-11 |
| A | US 4765231 A (MICHAEL J. ANIELLO), 23 August 1988 (23.08.1988), column 2, line 9 - column 3, line 11, claims 1-14, see fig. -- | 1-11 |
| A | EP 0523283 A1 (SPIELDIEENER, ROBERT), 20 January 1993 (20.01.1993), column 2, line 4 - column 4, line 14, figures 1-6, claims 1-16 -- | 1-11 |

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "B" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed
- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

26 November 2004

Date of mailing of the international search report

01-12-2004

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| A | US 5702299 A (GÖRAN SUNDHOLM), 30 December 1997 (30.12.1997), column 1, line 5 - line 67, figures 1-2,5, claims 1-7 -- | 1-11 |
| A | US 5687796 A (GÖRAN SUNDHOLM), 18 November 1997 (18.11.1997), column 1, line 3 - line 52, figures 1-6,16-18, claims 1-6 -- ----- | 1-11 |

INTERNATIONAL SEARCH REPORT

Information on patent family members

30/10/2004

International application No.

PCT/FI 2004/000512

| | | | | | | | |
|----|---------|----|------------|------|----------|-----|------------|
| US | 5957212 | A | 28/09/1999 | AT | 163556 | T | 15/03/1998 |
| | | | | AU | 668394 | B | 02/05/1996 |
| | | | | AU | 4041893 | A | 29/11/1993 |
| | | | | BR | 9306303 | A | 30/06/1998 |
| | | | | CA | 2134216 | A | 11/11/1993 |
| | | | | DE | 69317280 | D,T | 08/10/1998 |
| | | | | DK | 637977 | T | 06/04/1998 |
| | | | | EP | 0637977 | A,B | 15/02/1995 |
| | | | | SE | 0637977 | T3 | |
| | | | | ES | 2112986 | T | 16/04/1998 |
| | | | | FI | 94098 | B,C | 13/04/1995 |
| | | | | FI | 921937 | A | 30/10/1993 |
| | | | | JP | 3341892 | B | 05/11/2002 |
| | | | | JP | 7506272 | T | 13/07/1995 |
| | | | | KR | 260647 | B | 01/07/2000 |
| | | | | NO | 304818 | B | 22/02/1999 |
| | | | | NO | 944119 | A | 28/10/1994 |
| | | | | RU | 2111029 | C | 20/05/1998 |
| | | | | SG | 49209 | A | 18/05/1998 |
| | | | | US | 5687796 | A | 18/11/1997 |
| | | | | WO | 9321997 | A | 11/11/1993 |
| US | 4765231 | A | 23/08/1988 | NONE | | | |
| EP | 0523283 | A1 | 20/01/1993 | AT | 120843 | T | 15/04/1995 |
| | | | | DE | 4123657 | A | 21/01/1993 |
| | | | | DE | 9113513 | U | 19/12/1991 |
| | | | | DE | 59105122 | D | 00/00/0000 |
| US | 5702299 | A | 30/12/1997 | AU | 673737 | B | 21/11/1996 |
| | | | | AU | 6571294 | A | 12/12/1994 |
| | | | | CA | 2160891 | A | 24/11/1994 |
| | | | | CN | 1059351 | B | 13/12/2000 |
| | | | | CN | 1123006 | A | 22/05/1996 |
| | | | | DE | 69433358 | D,T | 09/09/2004 |
| | | | | DK | 703807 | T | 29/03/2004 |
| | | | | EP | 0703807 | A,B | 03/04/1996 |
| | | | | SE | 0703807 | T3 | |
| | | | | EP | 1029561 | A | 23/08/2000 |
| | | | | ES | 2210253 | T | 01/07/2004 |
| | | | | FI | 932135 | D | 00/00/0000 |
| | | | | FI | 955425 | A | 10/11/1995 |
| | | | | JP | 8510042 | T | 22/10/1996 |
| | | | | NO | 314440 | B | 24/03/2003 |
| | | | | NO | 954540 | A | 10/11/1995 |
| | | | | RU | 2120317 | C | 20/10/1998 |
| | | | | SG | 47402 | A | 17/04/1998 |
| | | | | WO | 9426356 | A | 24/11/1994 |

INTERNATIONAL SEARCH REPORT

Information on patent family members

30/10/2004

International application No.

PCT/FI 2004/000512

| | | | | | | | |
|----|---------|---|------------|----|----------|------|------------|
| US | 5687796 | A | 18/11/1997 | AT | 163556 | T | 15/03/1998 |
| | | | | AU | 668394 | B | 02/05/1996 |
| | | | | AU | 4041893 | A | 29/11/1993 |
| | | | | BR | 9306303 | A | 30/06/1998 |
| | | | | CA | 2134216 | A | 11/11/1993 |
| | | | | DE | 69317280 | D, T | 08/10/1998 |
| | | | | DK | 637977 | T | 06/04/1998 |
| | | | | EP | 0637977 | A, B | 15/02/1995 |
| | | | | SE | 0637977 | T3 | |
| | | | | ES | 2112986 | T | 16/04/1998 |
| | | | | FI | 94098 | B, C | 13/04/1995 |
| | | | | FI | 921937 | A | 30/10/1993 |
| | | | | JP | 3341892 | B | 05/11/2002 |
| | | | | JP | 7506272 | T | 13/07/1995 |
| | | | | KR | 260647 | B | 01/07/2000 |
| | | | | NO | 304818 | B | 22/02/1999 |
| | | | | NO | 944119 | A | 28/10/1994 |
| | | | | RU | 2111029 | C | 20/05/1998 |
| | | | | SG | 49209 | A | 18/05/1998 |
| | | | | US | 5957212 | A | 28/09/1999 |
| | | | | WO | 9321997 | A | 11/11/1993 |